

Title (en)
VALVE TIMING SYSTEM FOR AN INTERNAL COMBUSTION ENGINE

Title (de)
VENTILSTEUERUNG FÜR EINE BRENNKRAFTMASCHINE

Title (fr)
MECANISME DE DISTRIBUTION POUR UN MOTEUR A COMBUSTION INTERNE

Publication
EP 1084330 B1 20021030 (DE)

Application
EP 99924907 A 19990507

Priority
• DE 19825307 A 19980605
• EP 9903154 W 19990507

Abstract (en)
[origin: DE19825307A1] The invention relates to a valve timing system (10) for an internal combustion engine, wherein a camshaft (4) having a control cam (2) actuates a valve (7) through a cam follower (6) whose contact path (8) can be changed on the cam side using a control device (11) to modify the valve opening time. In order to produce a compact control device (11), said device comprises a push-oscillating arm (14) guided in the direction of valve lift (arrow "B") by a first push-turn joint (12) mounted on the engine housing side and by an additional push-turn joint provided on the rocking segment side, which includes a control opening (15) traversed with some play by a control cam-free segment of the camshaft (4), on the periphery of which a controlled actuated element (guide ring, 20) of a regulating device (16) arranged in or on a camshaft (4) and rotating with the latter engages in such a way that the push-oscillating arm (14) carries out a periodic swing motion for forced control of the rocking segment (5) during each valve lift when the camshaft (4) is rotating.

IPC 1-7
F01L 1/356; **F01L 13/00**; **F01L 1/14**; **F01L 1/34**

IPC 8 full level
F01L 1/14 (2006.01); **F01L 1/34** (2006.01); **F01L 1/356** (2006.01); **F01L 13/00** (2006.01)

CPC (source: EP US)
F01L 1/14 (2013.01 - EP US); **F01L 1/34** (2013.01 - EP US); **F01L 1/356** (2013.01 - EP US); **F01L 13/0063** (2013.01 - EP US)

Designated contracting state (EPC)
DE ES FR GB IT

DOCDB simple family (publication)
DE 19825307 A1 19991209; DE 59903259 D1 20021205; EP 1084330 A1 20010321; EP 1084330 B1 20021030; ES 2185349 T3 20030416; JP 2002517669 A 20020618; JP 4283999 B2 20090624; US 6382149 B1 20020507; WO 9964729 A1 19991216

DOCDB simple family (application)
DE 19825307 A 19980605; DE 59903259 T 19990507; EP 9903154 W 19990507; EP 99924907 A 19990507; ES 99924907 T 19990507; JP 2000553708 A 19990507; US 70187401 A 20010205